

**PATENT COOPERATION TREATY**  
**PCT**

10/597470

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
 (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 1056-PCT	<b>FOR FURTHER ACTION</b>	
	See item 4 below	
International application No. PCT/JP2005/000972	International filing date ( <i>day/month/year</i> ) 26 January 2005 (26.01.2005)	Priority date ( <i>day/month/year</i> ) 26 January 2004 (26.01.2004)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant <b>KYOCERA CORPORATION</b>		

	<p>1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).</p> <p>2. This REPORT consists of a total of 4 sheets, including this cover sheet.</p> <p>In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.</p>	
3.	This report contains indications relating to the following items:	
<input checked="" type="checkbox"/>	Box No. I	Basis of the report
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
4.	The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).	

Date of issuance of this report 22 August 2006 (22.08.2006)	
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No. +41 22 338 82 70	Authorized officer  <b>Masashi Honda</b> e-mail: pt08@wipo.int

**PATENT COOPERATION TREATY**

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

**PCT**  
*TRANSLATION*

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

(PCT Rule 43bis.1)

		Date of mailing (day/month/year)
Applicant's or agent's file reference <b>1056-PCT</b>		<b>FOR FURTHER ACTION</b> See paragraph 2 below
International application No. <b>PCT/JP2005/000972</b>	International filing date (day/month/year) <b>26.01.2005</b>	Priority date (day/month/year) <b>26.01.2004</b>
International Patent Classification (IPC) or both national classification and IPC		
Applicant <b>KYOCERA CORPORATION</b>		

1. This opinion contains indications relating to the following items:

- |                                     |              |  |
|-------------------------------------|--------------|--|
| <input checked="" type="checkbox"/> | Box No. I    | Basis of the opinion   |
| <input type="checkbox"/>            | Box No. II   | Priority   |
| <input type="checkbox"/>            | Box No. III  | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability   |
| <input type="checkbox"/>            | Box No. IV   | Lack of unity of invention   |
| <input checked="" type="checkbox"/> | Box No. V    | Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/>            | Box No. VI   | Certain documents cited  |
| <input type="checkbox"/>            | Box No. VII  | Certain defects in the international application   |
| <input type="checkbox"/>            | Box No. VIII | Certain observations on the international application  |

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP	Authorized officer
Facsimile No.	Telephone No.

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.  
PCT/JP2005/000972

Box No. I	Basis of this opinion
1.	With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item. <input type="checkbox"/> This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2.	With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of: a. type of material <input type="checkbox"/> a sequence listing <input type="checkbox"/> table(s) related to the sequence listing b. format of material <input type="checkbox"/> in written format <input type="checkbox"/> in computer readable form c. time of filing/furnishing <input type="checkbox"/> contained in the international application as filed. <input type="checkbox"/> filed together with the international application in computer readable form. <input type="checkbox"/> furnished subsequently to this Authority for the purposes of search.
3.	<input type="checkbox"/> In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4.	Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No. <b>PCT/JP2005/000972</b>
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<b>Box No. V</b> <b>Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</b>																			
<p><b>1. Statement</b></p> <table> <tr> <td align="center"><b>Novelty (N)</b></td> <td>Claims <u>1 - 41</u></td> <td align="center"><input checked="" type="checkbox"/> YES</td> </tr> <tr> <td></td> <td>Claims _____</td> <td align="center"><input type="checkbox"/> NO</td> </tr> <tr> <td align="center"><b>Inventive step (IS)</b></td> <td>Claims _____</td> <td align="center"><input type="checkbox"/> YES</td> </tr> <tr> <td></td> <td>Claims <u>1 - 41</u></td> <td align="center"><input type="checkbox"/> NO</td> </tr> <tr> <td align="center"><b>Industrial applicability (IA)</b></td> <td>Claims <u>1 - 41</u></td> <td align="center"><input checked="" type="checkbox"/> YES</td> </tr> <tr> <td></td> <td>Claims _____</td> <td align="center"><input type="checkbox"/> NO</td> </tr> </table>		<b>Novelty (N)</b>	Claims <u>1 - 41</u>	<input checked="" type="checkbox"/> YES		Claims _____	<input type="checkbox"/> NO	<b>Inventive step (IS)</b>	Claims _____	<input type="checkbox"/> YES		Claims <u>1 - 41</u>	<input type="checkbox"/> NO	<b>Industrial applicability (IA)</b>	Claims <u>1 - 41</u>	<input checked="" type="checkbox"/> YES		Claims _____	<input type="checkbox"/> NO
<b>Novelty (N)</b>	Claims <u>1 - 41</u>	<input checked="" type="checkbox"/> YES																	
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	Claims <u>1 - 41</u>	<input type="checkbox"/> NO																	
<b>Industrial applicability (IA)</b>	Claims <u>1 - 41</u>	<input checked="" type="checkbox"/> YES																	
	Claims _____	<input type="checkbox"/> NO																	
<p><b>2. Citations and explanations:</b></p> <p>Document 1: WO2003/21691, A (Matsushita Electric Industrial Co., Ltd.), 13 March, 2003 (13.03.03), &amp; US 2004/104391 A &amp; EP 1367655 A1</p> <p>Document 2: JP 2003-249373, A (Fuji Photo Film Co., Ltd.), 05 September, 2003 (05.09.03), (Family: none)</p> <p>Document 3: LEE Jinwook, Full Color Emission from II-VI Semiconductor Quantum Dot-Polymer Composites, Adv. Mater., Vol. 12, No. 15, pages 1102-1105, 02 August, 2000 (02.08.00)</p> <p>Document 4: JP 2002-121548, A (Mitsubishi Chemical Corp.), 26 April, 2002 (26.04.02), (Family: none)</p> <p>Document 5: JP 2003-243727, A (Nichia Chemical Industries, Ltd.), 29 August, 2003 (29.08.03), (Family: none)</p> <p>Document 6: JP 2002-314142, A (Toyota Gosei Co., Ltd.), 25 October, 2002 (25.10.02), &amp; US 2002/163302 A &amp; EP 1249873 A2</p> <p>Document 1 describes that it is effective to add ultrafine particles of which average particle size is 20nm or less to a light-emitting device which converts wavelength containing phosphor of which particle size is 0.1μm or more within resin matrices. Consequently, as described in documents 2-4, utilizing semiconductor ultrafine particles, occasionally having core-shell structure, which is utilized as optimal substance for a similar light emitting device capable of converting wavelength, as the ultrafine particle described in document 1 is easy for a person skilled in the art to conceive.</p> <p>Further, with regard to resin to enclose phosphor particles or semiconductor ultrafine particles used in light-emitting device capable of converting wavelength, various types of transparent/ permeable resin described in documents 2-6 is used and it is something that a person skilled in the art arbitrarily chooses. Moreover, a person skilled in the art can also choose types and characteristics of phosphor or semiconductor ultrafine particles to be enclosed in the resin from options publicly known.</p> <p>Therefore, the subject matters of claims 1-41 of the present application is self-evident due to documents 1-6 and does not seem to involve an inventive step.</p> <p>The inventions described in the subject matters of claims 1-41 seem to have industrial availability.</p>																			